Fields of Opportunities

STATE OF IOWA

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DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

Memo

Date: 22 April 2008

From: Elaine Douskey, UST Supervisor

To: Iowa Licensed UST Installers/Inspectors

Subject: Installation Inspection Checklist

As of July 1, 2007, the Iowa DNR Underground Storage Tank Section assumed responsibility of the UST Installer/Inspector Licensing [567--Chapter 134 Iowa Administrative Code]. According to the definition of *inspector* in the rule, it means *a licensed individual who is engaged in the inspection and approval of the installation of new or upgraded underground storage tank systems [567--134.17].* The inspector's observations of the installation activity are crucial to ensuring proper installation procedures were followed and for the prevention of releases during the operation of the UST system.

According to 134.26(4) *Inspectors are required to use an inspection form or checklist, which has been approved by the department*. Since the DNR just began administering the installer inspector program in July 2007, we are not sure what had been previously approved as a checklist. Nonetheless, we would ask you to use only the enclosed form for all installation inspections.

Our current rules stipulate a minimum of two inspections are required in connection with a new UST system. There should be a minimum of three inspections of a new UST system. New Chapter 134 rules will propose such a change. The enclosed checklist includes three inspections:

1. **The first inspection takes place before the system goes into the ground and includes visual inspection of the primary components of the system and witnessing the testing of the primary and secondary walls of the tank(s).**
2. **The second inspection takes place when the excavation is completed and all primary components of the system are in place, but before it is backfilled. The inspector will witness testing of the primary and secondary piping and testing of secondary containment components (secondary piping, sumps and under dispenser containment (UDC).**

3. **The third inspection takes place after backfilling and before operation. This inspection verifies the integrity of the system, i.e., all components are in place and ready for operation. This inspection involves a walk through visual inspection of the UST system from the sumps to the dispensers. The inspector will verify the leak detection equipment for the UST system, that it is evaluated for the UST system and that the entire system is ready for operation. The inspector signs the installation inspection checklist when satisfied that all work meets UST requirements, is documented and complete.**

In the case of all other installations, replacements and technical upgrades the following applies.

Activities Requiring an Installation Inspection:

1. **When concrete is cut or excavation is required over the UST system or when a component that routinely contains product is installed, replaced or repaired: two inspections. For example, when product line is replaced or repaired—one inspection when the system is uncovered and replaced or repaired and the second inspection when the system is covered and ready to return to operation.**
2. **When a new ATG system and its components (sump sensors, ELLD) are installed (where one hadn't existed before): one inspection after the installation is complete to ensure the system is operational and the UST owner/operator understands its operation and his or her responsibilities.**
3. **Replacing a submersible turbine sump at a site that does not have secondary containment. A replacement submersible turbine sump requires secondary containment and therefore, at least one inspection after the equipment is installed, but before it is backfilled.**
4. **When installing water-tight boots on sumps and UDC: one inspection when the repair is made and before surface restored.**
5. **When repairing or replacing sumps or UDC: one inspection after the repair or replacement is completed and before surface restored.**

Activities Not Requiring an Installation Inspection:

1. **Replacing or installing overfill prevention devices, such as drop tubes.**
2. **Replacing spill buckets.***
3. **Replacing ATG systems (where one had already existed).**
4. **Replacing submersible turbine pumps that already have secondary containment.***
5. **Replacing or installing automatic line leak detectors.***
6. **Internal periodic lining inspection or lining repair.**
7. **Repair of cathodic protection systems.**
8. **Replacing interstitial sensors.**
9. **Replacing flex connectors in contained sumps.**
10. **Line and tank tightness testing.**
11. **Installation or repair of a cathodic protection system designed by a corrosion expert.**

***An inspection is recommended, but entirely up to the installer, when installing this equipment in an uncontained sump.**

You are reminded that as an Installation Inspector, you may not provide installation inspection service to your employer [567134.19].

If you have a question about what does or does not need an inspection, contact Tom Collins (515.281.8879) or Paul Nelson (515.281.8779).

Please begin using this form only for all installation inspections and technical upgrades after 25 April 2008.

The checklist is available on our website under Forms/Technical Resources/ Manuals and then under UST Technical Resources at the bottom of the page: http://www.iowadnr.com/land/ust/index.html. Please refer to the website for the latest information on the UST license renewal and refresher courses.